STATE OF ARIZONA

DEBRA K. DAVENPORT, CPA
AUDITOR GENERAL

OFFICE OF THE

AUDITOR GENERAL

WILLIAM THOMSON
DEPUTY AUDITOR GENERAL

March 25, 2008

The Honorable John Nelson, Chair
Joint Legislative Audit Committee

The Honorable Robert Blendu, Vice Chair
Joint Legislative Audit Committee

Dear Representative Nelson and Senator Blendu:

Our Office has recently completed a 12-month followup of the Arizona Department of Education—Information Management regarding the implementation status of the 32 audit recommendations (including sub-parts of the recommendations) presented in the performance audit report released in August 2006 (Auditor General Report No. 06-07). As the attached grid indicates:

- ■ 8 have been implemented;
- ■ 15 are in the process of being implemented; and
- ■ 9 have not been implemented.

Our Office will continue to follow up at 6-month intervals with the Department on the status of those recommendations that have not yet been fully implemented.

Sincerely,

Melanie M. Chesney, Director
Performance Audit Division

MMC:Sjb
Attachment

cc: Tom Horne, State Superintendent of Public Instruction
        Arizona Department of Education

ARIZONA DEPARTMENT OF EDUCATION
INFORMATION MANAGEMENT
12-Month Follow-Up Report To
Auditor General Report No. 06-07

FINDING 1: **ADE needs to better manage security of its information technology systems and operations**

Recommendation	Status of Implementing Recommendation	Additional Explanation
1. ADE should develop and implement an ongoing process for addressing IT security vulnerabilities or control weaknesses when they are discovered. The process should ensure that known security concerns are evaluated and prioritized in order of risk, that specific plans to address them are developed, and that responsibility for correcting them is assigned.	Implementation in Process	ADE is in the process of establishing an IT Security Office and hiring an information security officer and security analyst. The Security Office will manage all of the security-related recommendations identified in this audit.
2. ADE should identify specific security objectives, assess its current set of policies and procedures against those objectives, analyze any gaps, consider the risk associated with each, develop a plan to implement effective policies and procedures, and monitor them on a regular basis.	Implementation in Process	ADE is in the process of developing a security plan and security-related guidelines. ADE reported that the gap/risk analysis portion of this recommendation will not be completed until July 2009.
3. ADE should develop a process to identify and implement specific security guidelines for its systems, incorporate them within its systems development and testing process, and train its development and testing staff on security concerns and methods.	**Implemented at 6 Months**	
4. ADE should consider creating an appropriate position to be responsible for all IT security within ADE. The reporting line of the security position should be such that it can effectively design, implement, and enforce compliance with the organization's security policies, standards, and procedures, and ensure that they are functioning effectively.	**Implemented at 6 Months**	

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FINDING 2:   **ADE can further enhance SAIS' reliability**

Recommendation	Status of Implementing Recommendation	Additional Explanation
1. To improve SAIS data reliability, ADE should implement additional controls. Specifically, ADE should:		
a. Establish a department-wide comprehensive procedure for developing and implementing business rules;	**Not Implemented**	ADE originally planned to submit a request for additional staff in fiscal year 2009 and have this recommendation completed by December 2010. Given the current budget deficit, however, ADE withheld this request and plans to reevaluate the appropriateness of its submission next year. Should it be submitted for fiscal year 2010, ADE plans to complete it by December 2011.
b. Implement automated variance checks by identifying appropriate staff to determine what types of variance checks should be added, as well as assigning responsibility for following up on any data variances that appear unreasonable; and	**Not Implemented**	ADE originally planned to submit a request for additional staff in fiscal year 2009 and complete this recommendation by December 2011. Given the current budget deficit, however, ADE withheld this request and plans to reevaluate the appropriateness of its submission next year. Should it be submitted for fiscal year 2010, ADE plans to complete it by December 2012.

FINDING 2: **ADE can further enhance SAIS' reliability (cont'd)**

Recommendation	Status of Implementing Recommendation	Additional Explanation
c. Add processing controls such as run-to-run totals and data reconciliation, and review information collected from the controls at least twice a month to help prevent potential problems with SAIS data.	Implementation in Process	ADE has worked to establish a periodic notification process for SAIS processing problems. However, ADE indicated that additional staff are needed to complete this recommendation. ADE planned to submit a request for additional staff in fiscal year 2009 and complete the recommendation by December 2009. Given the current budget deficit, however, ADE withheld this request and plans to reevaluate the appropriateness of its submission next year. Should it be submitted for fiscal year 2010, ADE plans to complete it by December 2010.
2. To help improve SAIS' functionality, ADE should:		
a. Obtain user acceptance of the one report that has been developed for archiving, and	Implementation in Process	ADE indicated that the archiving report that had been developed was not meeting users' needs. Therefore, ADE plans to address archiving functionality as a part of its Education Data Warehouse project. ADE estimates that it will complete archiving functionality by June 2008.
b. Develop and implement other SAIS-archived reports.	Implementation in Process	ADE plans to address archiving functionality as a part of its Education Data Warehouse project. ADE estimates that it will complete archiving functionality by June 2008.

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FINDING 2:   **ADE can further enhance SAIS' reliability (cont'd)**

Recommendation	Status of Implementing Recommendation	Additional Explanation
3. To address user concerns and identify additional ways to improve SAIS, ADE should:		
a. Establish a tactical team composed of representatives from ADE's IT section and both internal and external stakeholders to identify and prioritize its user community's needs; and	Implementation in Process	ADE's IT section and School Finance unit have started meeting on a regular basis to discuss the School Finance unit's needs.
b. Establish a schedule for implementing the agreed-upon SAIS changes.	Implementation in Process	ADE reported that the ADE IT section and School Finance unit also work together to schedule and implement immediate School Finance unit needs.
4. To improve SMS software performance, ADE should:		
a. Ensure the SAIS SMS software test environment is up-to-date and available when needed;	Implementation in Process	According to ADE and vendors, minimal changes were made to the SAIS system for the 2007-2008 school year and the software test environment was generally available in a timely manner. However, ADE reported that it plans to make additional changes for fiscal year 2009. As such, additional time is required to determine whether the software test environment is up-to-date and available to vendors when significant changes are made.

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FINDING 2: **ADE can further enhance SAIS' reliability (concl'd)**

Recommendation	Status of Implementing Recommendation	Additional Explanation
b. Monitor software performance and take steps to address any problems identified; and	Not Implemented	As indicated in its response to the report, ADE believes additional resources are needed to implement this recommendation. ADE originally planned to request additional resources in its fiscal year 2009 Decision Package and implement the recommendation around June 2009. Given the current budget deficit, however, ADE withheld this request and plans to reevaluate the appropriateness of its submission next year. Should it be submitted for fiscal year 2010, ADE plans to complete the recommendation by June 2010.
c. Consider establishing a recurring SMS software certification or rating process.	Not Implemented	As indicated in its response to the report, ADE believes additional resources are needed to implement this recommendation. ADE originally planned to request additional resources in its fiscal year 2009 Decision Package and have the recommendation implemented around June 2009. Given the current budget deficit, however, ADE withheld this request and plans to reevaluate the appropriateness of its submission next year. Should it be submitted for fiscal year 2010, ADE plans to complete the recommendation by June 2010.

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FINDING 3:   ADE needs to improve IT project management and operation oversight

Recommendation	Status of Implementing Recommendation	Additional Explanation
1. ADE should develop, adopt, and enforce the use of a single, effective agency-wide SDLC process.	Implementation in Process	ADE has developed some aspects of an SDLC process such as flowcharts outlining the process and a program change request form.
2. ADE should create a plan to review current applications' technical and user documentation:		
a. Determine what needs improvement in order to maintain the applications;	**Not Implemented**	According to ADE, it needs additional staff and resources to complete this recommendation, which it planned to request for fiscal year 2009. Given the current budget deficit, however, ADE withheld this request and plans to reevaluate the appropriateness of its submission next year.Should it be submitted for fiscal year 2010, ADE plans to complete the recommendation by June 2012.
b. Address identified gaps; and	**Not Implemented**	According to ADE, it needs additional staff and resources to complete this recommendation, which it planned to request for fiscal year 2009. Given the current budget deficit, however, ADE withheld this request and plans to reevaluate the appropriateness of its submission next year. Should it be submitted for fiscal year 2010, ADE plans to complete the recommendation by June 2012.

FINDING 3:   ADE needs to improve IT project management and operation oversight (cont'd)

Recommendation	Status of Implementing Recommendation	Additional Explanation
c. Prioritize and schedule improvement activities.	**Not Implemented**	According to ADE, it needs additional staff and resources to complete this recommendation, which it planned to request for fiscal year 2009. Given the current budget deficit, however, ADE withheld this request and plans to reevaluate the appropriateness of its submission next year. Should it be submitted for fiscal year 2010, ADE plans to complete the recommendation by June 2012.
3. ADE should identify, collect, and measure performance measurements for key IT functions and operations.	Implementation in Process	According to ADE, it has continued to improve its ability to track and report on technical performance measurements. However, ADE has not identified, collected, or measured nontechnical performance measurements information for key IT functions and operations.
4. ADE should develop a plan and address resource requirements to allow it to perform regular risk assessments of its IT systems and operations, and should develop procedures to address issues raised.	Implementation in Process	ADE has established guidelines for conducting risk assessments. ADE planned to request additional staff for fiscal year 2009 to assist in implementing this recommendation. Given the current budget deficit, however, ADE withheld this request, and plans to reevaluate the appropriateness of its submission for fiscal year 2010.

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FINDING 3: **ADE needs to improve IT project management and operation oversight (concl'd)**

Recommendation	Status of Implementing Recommendation	Additional Explanation
5. ADE should fully develop a business continuity plan and should include provisions for regularly updating and testing the plan.	Implementation in Process	Although ADE developed a business continuity plan, the plan focuses only on restoring information systems (commonly called an IT disaster recovery plan) and does not address the continuity of business operations, such as creating, disseminating, and testing employee procedures used to minimize the disruption to business operations if there was a disruption in IT services. ADE planned to request additional staff for fiscal year 2009 to assist in implementing this recommendation. Given the current budget deficit, however, ADE withheld this request and plans to reevaluate the appropriateness of its submission for fiscal year 2010.

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FINDING 4: **ADE needs to ensure its information technology meets its business needs**

Recommendation	Status of Implementing Recommendation	Additional Explanation
1. To ensure that IT can better meet ADE's mission and business needs, ADE should establish an IT steering committee that should include representatives from senior management, user management, and the IT function, such as the superintendent, and/or deputy superintendent, the associate superintendents, the CIO, and other key ADE stakeholders as appropriate.	Implementation in Process	ADE has established an IT Advisory Group (ITAG) and has a goal to include external group members and define objectives.
2. Once established, the ADE IT steering committee should:		
a. Ensure adequate IT involvement in the Department's and the divisions' planning processes;	**Implemented at 12 months**	

FINDING 4:   **ADE needs to ensure its information technology meets its business needs (cont'd)**

Recommendation	Status of Implementing Recommendation	Additional Explanation
b. Provide overall IT direction for the Department; and	Implementation in Process	ADE has established ITAG but this group is not yet at the stage where it is able to provide informed IT direction.
c. Ensure that adequate processes exist for identifying priorities and funding, and allocating department-wide IT resource costs.	Implementation in Process	ADE's Project Management Office continues to refine its processes for prioritizing, funding, and allocating IT resource costs. However, according to ADE, there has been turnover in key positions in its Project Management Office which has delayed progress of this recommendation.
3. To ensure that IT can effectively meet ADE's business needs, ADE should review the IT section's organizational placement within ADE.	**Implemented at 6 Months**	
4. ADE should ensure that the IT section establishes an effective planning process which includes:		
a. Developing, with input from key stakeholders, an IT plan that defines the long-term direction that aligns with ADE's business needs; and	**Not Implemented**	ADE indicated that unexpected and unfunded requests and mandates have impacted its ability to implement this recommendation.

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FINDING 4: **ADE needs to ensure its information technology meets its business needs (concl'd)**

Recommendation	Status of Implementing Recommendation	Additional Explanation
b. Developing an action plan that first formulates strategies; evaluates costs, benefits, and possible consequences of alternative courses of action; considers the resources needed; assigns responsibility for implementation; defines the steps that must be finished to complete the plan; sets a time frame for completion; and determines the resources necessary to carry it out.	**Not Implemented**	ADE indicated that unexpected and unfunded requests and mandates have impacted its ability to implement this recommendation.

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FINDING 5: **ADE not in full compliance with student-level data collection notification and disposal requirements**

Recommendation	Status of Implementing Recommendation	Additional Explanation
1. ADE should finish compiling the list of data elements that it collects through SAIS and should:		
a. Include references to the statutory authority for gathering each piece of information, as required by A.R.S. §15-1042(E);	**Implemented at 6 Months**	
b. Include in its list other data elements collected for which there is no specific statutory reference and cite the reference for the process that ADE must perform, or otherwise describe how the data fills a need in the process in order to make SAIS complete; and	**Implemented at 6 Months**	
c. Establish a deadline to publish the information no later than by the end of fiscal year 2007.	**Implemented at 6 Months**	
2. ADE should adopt a retention schedule and guidelines to remove outdated student data from SAIS.	**Implemented at 6 Months**	